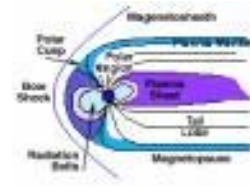




MAGNETOSPHERE DATA COLLECTION



From Observatories:

Kp index : Estimated Planetary K index:

This plot contains the estimated 3-hour planetary K-index. This index is derived, at the U.S. Air Force Space Forecast Center, using data from ten ground-based magnetometers. K-indices of 5 or greater indicate storm-level geomagnetic activity. Values of 7 or greater indicate a severe geomagnetic storm.

What three days does this graph cover? _____

What were the highest K index levels for each of these days? _____

Are there any kp values of 5 or higher? _____

Are there any kp values of 7 or higher? _____

Kp Auroral Map:

What is the longitude, latitude, and corrected geomagnetic latitude for your area?

What would the kp level have to be for us to see aurora in our area? _____

Are there any areas in the world that might see auroral activity, based on this data, in the next few hours? _____ Where? _____

From Satellites:

Dst graph (Disturbance storm-time) from the ACE satellite :

This is a tool to characterize the strength of the magnetic field disturbance. Like the Kp graph, it is very easy to read and the scientists have interpreted data from the ACE satellite for you. This data is provided in a simple 'dial' format.

What is the current level of geo-magnetic storm activity?

When did the geo-magnetic storm arrive at Earth? _____

After looking at all of this data, answer this question. Be sure to cite actual data!

Has there been a measurable disturbance in the Earth's magnetic field?
